

Subsidence risk

The challenge

How can you analyse the risk of subsidence effectively? Subsidence Risk helps local authorities, utility companies, property owners and insurers to overcome this challenge.

Subsidence is no longer a 'one in a million' risk. April 2020 was the hottest April in 361 years and last summer was the third warmest since records began. There's been a surge in subsidence claims over the past three years, and as dry winters followed by hot and dry summers compound the subsidence problem, this pattern is expected to continue.

In fact, 12% of all home insurance claims related to subsidence in 2019. Up to 70% were tree-related, due to soil desiccation (particularly clay) or property foundations being undermined by tree root systems.



70%

of subsidence claims
are tree-related

Our solution

Datasets: see table

Coverage: GB (England, Scotland and Wales)

Subscription: annual contract

Subsidence Risk is an address-level data product that provides detailed data about underlying geology, soil and tree hazard information. This dataset can be run against building outlines or Unique Property Reference Numbers (UPRNs), which makes it ideal for quantifying risk at a granular, individual property basis.

Subsidence Risk is just one of emapsite's risk and perils products. It is available as a downloadable file (CSV format) for direct use or as an online service if you prefer a Data-as-a-Service model (reducing your data management overheads and ensuring currency).

emapsite also provides a data cleansing service to optimise your address lists, prior to using Subsidence Risk.

For further information: sales@emapsite.com

Subsidence risk

Why choose this product?

Subsidence Risk enables you to be more competitive, to mitigate exposure and win more business by creating better informed decision models.

- Create more attractive quotations
- Price premiums more competitively
- Deliver evidence-based exclusions, excess clauses
- Confidently sell on opportunities that might otherwise have been declined
- Avoid wasting time on quotations that are unlikely to be accepted

Insurers: improve your claims, customer service, and counter-fraud activities – such as tree-related claims where there are no trees.

Local Authorities: evidence your tree management and maintenance policies. Improve scheduling and reduce the costs of cyclical tree maintenance, ensure future risk is minimised by catching up on missed tree maintenance.

Utility companies: understand where soil and tree hazards pose a threat to underground assets, use Subsidence Risk data to better inform your modelling.

Pricing

Pricing is based on the number of individual addresses managed by the client (e.g. insurance policies, homes in a Local Authority area or Utility Company project area of interest). Data-cleansing service is an optional extra.

Subsidence Risk is part
of the emapsite portfolio of
Risk & Perils data products.

[Find out more >](#)

Surface insights against these fields, using building outlines or UPRNs
 Ask us for information about hybrid models and bespoke fields

A	UPRN	Ordnance Survey Unique Property Reference Number
B	nearest_tree_maxheight	HEIGHT (height of nearest tree to Property footprint)
C	nearest_tree_dist	PROXIMITY (of nearest tree to Property footprint)
D	tree_count_20m	COUNT A (count of trees between nearest tree [PROXIMITY] and 20m of property footprint)
E	highest_not_closest_20m	HEIGHT A (height of tallest tree between nearest tree [PROXIMITY] and 20m of property footprint)
F	distance_not_closest_20m	PROXIMITY A (of Height A tree to Property footprint)
G	highest_not_closest_30m	HEIGHT B (height of tallest tree between nearest tree [PROXIMITY] and 30m of property footprint)
H	distance_not_closest_30m	PROXIMITY B (of Height B tree to Property footprint)
I	tree_count_30m	COUNT B (count of trees between nearest tree [PROXIMITY] and 30m of property footprint)
J	collapsibles	NewGIP COLLAPS The individual hazard score value for collapsible deposits. Individual hazard score range: 3-18
K	running sand	NewGIP RSAND The individual hazard score value for running sand. Individual hazard score range: 3-22
L	compressibles	NewGIP COMP The individual hazard score value for compressible ground. Individual hazard score range: 29-148
M	shrink/swell	NewGIP SSWELL The individual hazard score value for shrink-swell. Individual hazard score range: 82-1000
N	solubles	NewGIP SOLUB The individual hazard score value for soluble rocks. Individual hazard score range: 11-73
O	landslide	NewGIP LANDSLIDE The individual hazard score value for landslide. Individual hazard score range: 35-787
P	total	NewGIP Total The total combined score of all 6 hazards. Individual hazard score range: 0-2000
Q	class	NewGIP Class Classification of the insurance hazard potential. Individual hazard score range: Low-High
R	clay_dom	NPD Clay_Dom Dominant Clay Risk. Individual hazard score range: 0-8
S	sand_dom	NPD Sand_Dom Dominant Sand vulnerability. Individual hazard score range: 0-2
T	silt_dom	NPD Silt_Dom Dominant Silt vulnerability. Individual hazard score range: 0-1
U	soft_dom	NPD Soft_Dom Dominant Soft soil vulnerability. Individual hazard score range: 0-1
V	peat_dom	NPD Peat_Dom Dominant Peat vulnerability. Individual hazard score range: 0-1
W	Total	NPD Total Combined score of all 5 hazards. Individual hazard score range: 0-10
X	Composite Class	NPD Class Classification of all 5 hazards. Individual hazard score range: Extremely Low to Extremely High
1	Motion Map	MOTION_MAP (Position, velocity, and acceleration of an object)
2	tree_threat_score	TREE_SCORE (tree based subsidence risk score, range 0-19)
3	Root diameter	ROOT_DIAM (Root diameter is the height of the trees)
T	Trees that could hit the building	HIT_BUILDING (Count of Trees that would hit the building, if they were to fall over. Height of tree > distance to building)

Why emapsite?

We help you be even more competitive/successful.

emapsite has a long-standing reputation for delivering location data and business intelligence excellence to the UK's top insurers – quality, quantity, capability, and cost.

Our cross-sector experience lets us bring innovation and insight to our product development, which in turn delivers user-friendly, insightful products for you and your clients.

We provide ongoing support for Subsidence Risk users, with access to developers who can extend the risk portfolio to suit your systems and business goals.

The emapsite team is always on hand to provide use cases and customer support – helpful advice from experts who understand subsidence risk challenges.

We invite you to collaborate with us, explore the science and challenge us to make a difference.

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